

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A submerged sample observation apparatus comprising:

a scanning probe microscope including a cantilever having a probe arranged at ~~the~~a forward end thereof, a light source for applying light on the cantilever and a detector for detecting the light reflected from the cantilever;

a sample container having a side wall for holding a liquid therein; and

means arranged on ~~the~~a surface of the liquid for preventing volatilization of the liquid;

wherein the probe is brought in closely opposed relation to a sample in the liquid in the sample container, the relative positions of a probe and a sample are changed and, based on the interaction between the probe and the sample, a surface image of the sample is produced thereby to observe the sample.
2. (Original) A submerged sample observation apparatus according to claim 1, wherein said means for preventing volatilization of said liquid is a layer of a sealing liquid formed on the surface of said liquid, said sealing liquid having a lower specific gravity than said first liquid and not mixed with said first liquid.
3. (Original) A submerged sample observation apparatus according to claim 1, wherein said means for preventing volatilization of said liquid is a layer of an oil formed on the surface of said liquid.
4. (Original) A submerged sample observation apparatus according to claim 1, wherein said means for preventing volatilization of said liquid is a Langmuir-Blodgett film formed on the surface of said liquid.

5. (Original) A submerged sample observation apparatus according to claim 1, wherein said means for preventing volatilization of said liquid is a resin film formed on the surface of said liquid.

6-10. (Cancelled)

11. (Currently Amended) A method of observing a sample submerged in a liquid using a scanning probe microscope comprising a cantilever having a probe arranged at ~~the~~a forward end thereof, a light source for applying light on the cantilever and a detector for detecting the light reflected from the cantilever;

wherein the probe is brought in closely opposed relation to a sample in the liquid in a sample container, the relative positions of the probe and the sample are changed and, based on the interaction between the probe and the sample, a surface image of the sample is produced thereby to observe the sample, and

wherein means for preventing volatilization of the liquid is arranged on ~~the~~a surface of the liquid.

12. (Original) A method of observing a sample submerged in a liquid according to claim 11, wherein said means for preventing volatilization of said liquid is a layer of a sealing liquid formed on the surface of said liquid, said sealing liquid having a lower specific gravity than said first liquid and not mixed with said first liquid.

13. (Original) A method of observing a sample submerged in a liquid according to claim 11, wherein said means for preventing volatilization of said liquid is a layer of an oil formed on the surface of said liquid.

14. (Original) A method of observing a sample submerged in a liquid according to claim 11, wherein said means for preventing volatilization of said liquid is a Langmuir-Blodgett film formed on the surface of said liquid.

15. (Original) A method of observing a sample submerged in a liquid according to claim 11, wherein said means for preventing volatilization of said liquid is a resin film formed on the surface of said liquid.

16-20. (Cancelled)